In the Claims:

1. (Original) An access point for scheduling delivery of units of data to a plurality of access terminals comprising:

a) a network interface for receiving data from a communication network;

b) a wireless interface for transmitting units of the data to a plurality of access terminals; and

c) a control system having a plurality of queues corresponding to the plurality of access terminals and adapted to:

i) store the data received over the communication network as units in the plurality of queues for the plurality of access terminals;

ii) determine a temporal fading factor based on a current channel condition relative to an average channel condition for each of the plurality of access terminals;

iii) determine a throughput fairness factor based on throughput capability for each of the plurality of access terminals;

iv) determine a delay Quality of Service (QoS) factor based on delivery times associated with at least one unit for each of the plurality of access terminals;

v) calculate a weighting factor based on the temporal fading factor, the throughput fairness factor, and the delay QoS factor for each of the plurality of access terminals; and

vi) select a unit for transmission via the wireless interface from one of the plurality of queues based on the weighting factor.

2. (Original) The access point of claim 1 wherein the control system is further adapted to:

a) determine the average channel condition over a period;

b) determine the current channel condition; and

c) calculate a ratio of the current channel condition to the average channel condition to determine the temporal fading factor.

3. (Original) The access point of claim 1 wherein the current and average channel conditions are derived from carrier-to-interference ratios.

4. (Original) The access point of claim 1 wherein the throughput fairness factor is calculated in a manner deemed to achieve a select level of fairness between access terminals having better channel conditions and access terminals having worse channel conditions.

5. (Original) The access point of claim 1 wherein the throughput fairness factor is a function of the average channel condition.

6. (Original) The access point of claim 1 wherein the throughput fairness factor is a function of an average throughput rate.

7. (Original) The access point of claim 6 wherein the throughput fairness factor is a further function of the average channel condition.

8. (Currently Amended) The access point of claim 1 wherein the delay QoS factor for each of the plurality of access terminals ~~terminal~~ is a function of the delivery ~~deliver~~ times for a plurality of the units in each of the plurality of queues ~~queue~~ including the next unit to transmit in each queue.

9. (Currently Amended) The access point of claim 8 wherein the delay QoS factor for each of the plurality of access terminals ~~terminal~~ is a function of an amount of data to be transmitted.

10. (Currently Amended) The access point of claim 1 wherein the control system is further adapted to:

a) calculate a weight inversely proportional to the delivery times ~~time~~ for a plurality of the units in each of the plurality of queues; and

b) calculate the delay QoS factors for each of the plurality of access terminals ~~terminal~~ by summing the weights for the plurality of the units in each of the plurality of queues.

11. (Currently Amended) The access point of claim 10 wherein the control system is further configured to assign a defined weight for units having a delivery time greater than a ~~the~~ defined threshold.

12. (Currently Amended) A method of scheduling transmission of units of data buffered in queues corresponding to a plurality of access terminals, the method comprising:

a) determining a temporal fading factor based on a current channel condition relative to an average channel condition for each of the plurality of access terminals;

b) determining a throughput fairness factor based on throughput capability for each of the plurality of access terminals;

c) determining a delay Quality of Service (QoS) factor based on delivery times associated with at least one unit for each of the plurality of access terminals;

d) calculating a weighting factor based on the temporal fading factor, the throughput fairness factor, and the delay QoS factor for each of the plurality of access terminals; and

e) selecting a unit for transmission via a ~~the~~ wireless interface from one of the ~~plurality of~~ queues based on the weighting factor.

13. (Original) The method of claim 12 further comprising:

a) determining the average channel condition over a period;

b) determining the current channel condition; and

c) calculating a ratio of the current channel condition to the average channel condition to determine the temporal fading factor.

14. (Original) The method of claim 12 wherein the current and average channel conditions are derived from carrier–to-interference ratios.

15. (Original) The method of claim 12 wherein the throughput fairness factor is calculated in a manner deemed to achieve a select level of fairness between access terminals having better channel conditions and access terminals having worse channel conditions.

16. (Original) The method of claim 12 wherein the throughput fairness factor is a function of the average channel condition.

17. (Original) The method of claim 12 wherein the throughput fairness factor is a function of an average throughput rate.

18. (Original) The method of claim 17 wherein the throughput fairness factor is a further function of the average channel condition.

19. (Currently Amended) The method of claim 12 wherein the delay QoS factor for each of the plurality of access terminals ~~terminal~~ is a function of the delivery times for a plurality of the units in each queue including the next unit to transmit in each queue.

20. (Currently Amended) The method of claim 19 wherein the delay QoS factor for each of the plurality of access terminals ~~terminal~~ is a function of an amount of data to be transmitted.

21. (Currently Amended) The method of claim 12 further comprising:

a) calculating a weight inversely proportional to the delivery times for a plurality of the units in each of the ~~plurality of~~ queues; and

b) calculating the delay QoS factors for each of the plurality of access terminals ~~terminal~~ by summing ~~the~~ weights for the plurality of the units in each of the ~~plurality of~~ queues.

22. (Original) The method of claim 21 further comprising assigning a defined weight for units having a delivery time greater than a defined threshold.

23. (Currently Amended) A computer readable medium having software for scheduling transmission of units of data buffered in queues corresponding to a plurality of access terminals, the software comprising instructions to:

a) determine a temporal fading factor based on a current channel condition relative to an average channel condition for each of the plurality of access terminals;

b) determine a throughput fairness factor based on throughput capability for each of the plurality of access terminals;

c) determine a delay Quality of Service (QoS) factor based on delivery times associated with at least one unit for each of the plurality of access terminals;

d) calculate a weighting factor based on the temporal fading factor, the throughput fairness factor, and the delay QoS factor for each of the plurality of access terminals; and

e) select a unit for transmission via ~~the~~ a wireless interface from one of the ~~plurality of~~ queues based on ~~the~~ a weighting factor.

24. (Original) The computer readable medium of claim 23 further comprising instructions to:

a) determine the average channel condition over a period;

b) determine the current channel condition; and

c) calculate a ratio of the current channel condition to the average channel condition to determine the temporal fading factor.

25. (Original) The computer readable medium of claim 23 wherein the current and average channel conditions are derived from carrier-to-interference ratios.

26. (Original) The computer readable medium of claim 23 wherein the throughput fairness factor is calculated in a manner deemed to achieve a select level of fairness between access terminals having better channel conditions and access terminals having worse channel conditions.

27. (Original) The computer readable medium of claim 23 wherein the throughput fairness factor is a function of the average channel condition.

28. (Original) The computer readable medium of claim 23 wherein the throughput fairness factor is a function of an average throughput rate.

29. (Original) The computer readable medium of claim 28 wherein the throughput fairness factor is a further function of the average channel condition.

30. (Original) The computer readable medium of claim 28 wherein the delay QoS factor for each access terminal is a function of the delivery times for a plurality of the units in each queue including the next unit to transmit in each queue.

31. (Original) The computer readable medium of claim 30 wherein the delay QoS factor for each access terminal is a function of an amount of data to be transmitted.

32. (Currently Amended) The computer readable medium of claim 28 further comprising instructions to:

a) calculate weight inversely proportional to the delivery times for a plurality of the units in each of the ~~plurality of~~ queues; and

b) calculate the delay QoS factors for each access terminal by summing the weights for the plurality of the units in each of the ~~plurality of~~ queues.

33. (Original) The computer readable medium of claim 28 further comprising instructions to assign a defined weight for units having a delivery time greater than a defined threshold.